

Pike's Peak, 1st to 4th; 6th, 7th, 12th, 18th, 19th, 20th, 23d, 26th, 29th, 30th, 31st; Colorado Springs, 17th, 18th, 19th; Carson City, Nev., 22d on mountains west of station; Otego, Nev., no date; Summit and Truckee, Cal., no date; on summit of Mt. Washington, 2d, 6th.

Snow on Ground at end of Month.—Pike's Peak, 16.50 inches.

Hail-storms were of frequent occurrence in various parts of the country, the most destructive being reported as follows: Newtown, Pa., 28th, between 5 and 6 p. m., very violent, thousands of panes of glass were broken, vegetable gardens and fields of grain entirely destroyed, fruit trees stripped of blossoms and leaves, and in several cases of bark. Path of storm very narrow, in some cases being so sharply defined as to follow the highway committing damages on but one side. In some portions of the track hailstones as large as walnuts fell, covering the ground to a depth of two to three inches. Direction of storm path, southwest to northeast, length about six miles. Terrific hailstorms visited this section about the middle of May, in 1860 and 1869. Belle County, Tex., 28th, p. m., very violent, destroying crops and damaging buildings; especial injury was inflicted upon corn, cotton, and wheat. New Hackensack, N. Y., 31st, during afternoon, terrific storm, extending from this point to Fishkill Plains. All grain along the storm's path entirely destroyed and corn and young fruit killed. Storm lasted about 45 minutes. Some hailstones were two inches in diameter, and on the following morning hail was found in some places a foot deep. St. Clair, Mich., 14th, 3.30 p. m., rain fell in almost incredible quantities, and hailstones were as large as hickory nuts; a large quantity of window glass was broken and great damage done to fruit trees. Bellville, Mo., 14th, about 1 p. m., very violent; fruit trees and garden truck suffered severely; large quantities of window glass broken; much damage to farm crops. Brockway Centre, Mich., 14th, about 3 p. m., terrific storm of hail and wind, hailstones largest ever known to have fallen here, some measured $1\frac{1}{2}$ inches in diameter. Hardly a house in the track of the storm but had all the glass in the north and west sides broken out. Several buildings were blown down and great damage done to grain crops and fruit trees. Length of storm path about six miles, direction from southwest to northeast. Bloomfield, N. J., 22d, hail fell in great quantities and of large size, doing terrible damage to greenhouses, tender plants and strawberries. This storm was equally severe at other points in New Jersey, viz, Paterson, Orange and Irvington. La Mesilla, 18th, half inch in diameter. Colorado Springs, 17th, 3.10 p. m., lasting 15 minutes; stones one inch in diameter. Spearville, Kans., 1st, stones size of walnuts; much property destroyed. Ft. Davis, 2d, 4th, 26th, stones as large as quails' eggs. Highland Station, Tex., 8th, doing considerable damage to crops and window glass. Corsicana, 24th, hailstones as large as hickory nuts, great damage to growing crops. Macon, N. C., 18th, 10.07 to 11.45 a. m., completely destroying gardens and farm crops in vicinity. Nora Springs, Ia., 30th, stones varying in size from peas to filberts.

RELATIVE HUMIDITY.

The percentage of mean relative humidity for the month ranges as follows: New England, 71 to 89; Middle Atlantic States, 58 to 90; South Atlantic States, 59 to 81; Eastern Gulf States, 59 to 81; Western Gulf States, 66 to 77; Ohio Valley and Tennessee, 55 to 69; Lower Lake region, 62 to 75; Upper Lake region, 65 to 75; Upper Mississippi valley, 57 to 69; Missouri valley, 66 to 70; Red River of the North valley, 67 to 69; Texas, 31 to 76; Middle Plateau, 26 to 34; Southern Plateau, 24 to 39; California, 39 to 75; Oregon, 44 to 57; Washington Territory, Olympia, 68. *High stations* report the following percentages not corrected for altitude: Pike's Peak, 65.4; Santa Fe, 35.8; Cheyenne, 52.8; Denver, 52.2; Mt. Washington, 82.1.

WINDS.

The prevailing winds during May, 1881, at Signal Service stations, are shown on chart No. II by arrows which fly with the wind. Along the New England and South Atlantic coasts, and from the Ohio valley southeastward to the ocean, they were from the *northeast*; along the Middle Atlantic coast, from *southeast* to *southwest*; throughout the Mississippi valley and in Texas, *southeast* and *south*; in the Lake region, *variable*; in the Rocky Mountain region, *southerly*; over the Middle and Northern Plateaux and Northern Pacific coast region, *north* to *west*.

Total Movements of the Air.—The following are the largest total movements at Signal Service stations: Mt. Washington, 20,133; North Platte, 11,418; Pikes Peak, 11,269; Portsmouth, N. C., 10,870; Dodge City, 10,576; Hatteras, 10,526; Kittyhawk, 10,430; Chincoteague, 10,318; Delaware Breakwater, 9,665; Ft. Elliott, 9,206; Thatcher's Island, 9,196; New Shoreham, 9,007; San Francisco, 8,776; Cape Henry, 8,763; Bismarck and Stockton, 8,662; Moorhead, 8,659; Sandusky, 8,459; Eagle Rock, 8,026. The *smallest* are: Phoenix, 1,721; Memphis, 1,860; La Mesilla, 1,981; Florence, 2,164; Silver City, 2,324; San Antonio, 2,595; Uvalde, 2,611; Nashville, 2,663; Deadwood, 2,771; Indianapolis, 2,803.

High Winds.—Winds of 50 miles per hour and over were reported as follows: On summit of Pikes Peak, 10th, a violent hurricane prevailed, reaching a maximum velocity of 112 miles per hour at 12.15 a. m. of the 11th, when the anemometer cups were blown away. From this time